AMENDMENTS TO THE CLAIMS:

The following listing of claims replaces all prior listings, and all prior versions, of claims in the application.

Listing of Claims:

Claims 1.-18. (Cancelled)

19. (currently amended) A process for recovering ditrimethylolpropane by-produced when producing trimethylolpropane by reacting n-butyraldehyde with formaldehyde in the presence of a basic catalyst, and then separating trimethylolpropane by extraction and distillation, with ditrimethylolpropane being recovered from a ~~still~~ bottom residue of said distillation, said process for recovering ditrimethylolpropane comprising:

i) adding hydroxylamine salts to said ~~still~~ bottom residue of said distillation;

ii) subjecting a formal compound contained in said ~~still~~ bottom residue to acid decomposition in the presence of said hydroxylamine salts, at a temperature of 20 to 180°C using at least one of a mineral acid and an organic acid; and

iii) recovering ditrimethylolpropane from the ~~still~~ bottom residue after said acid decomposition.

20. (currently amended) A process according to Claim 19, wherein the ditrimethylolpropane is recovered from acid decomposition products in the ~~still~~ bottom residue after the acid decomposition.

21. (currently amended) A process for recovering ditrimethylolpropane by-produced when producing trimethylolpropane by reacting n-butyraldehyde with formaldehyde in the presence of a basic catalyst, and then separating trimethylolpropane by extraction and distillation, with ditrimethylolpropane being recovered from a ~~still~~ bottom residue of said distillation, said process for recovering ditrimethylolpropane comprising:

i) removing high-boiling components having a higher boiling point than that of ditrimethylolpropane, by molecular distillation, from said ~~still~~ bottom residue of said distillation for separating trimethylolpropane;

ii) after said removing high-boiling components, which leaves a remainder of said ~~still~~ bottom residue, subjecting a formal compound contained in the remainder of said ~~still~~ bottom residue to acid decomposition, whereby resulting products of said acid decomposition are formed; and

iii) recovering dimethylolpropane by subjecting the resulting products of ii) to crystallization using a solvent, after said acid decomposition.

Claim 22. (cancelled).

23. (previously presented) A process according to Claim 21, wherein the acid decomposition of the formal compound is performed at a temperature of 20 to 180°C using at least one of a mineral acid and an organic acid.

Claim 24. (cancelled)

25. (currently amended) A process for recovering ditrimethylolpropane by-produced when producing trimethylolpropane by reacting n-butyraldehyde with formaldehyde in the presence of a basic catalyst, and then separating trimethylolpropane by extraction and distillation, with ditrimethylolpropane being recovered from a ~~still~~ bottom residue of said distillation, said process for recovering ditrimethylolpropane comprising:

i) subjecting said ~~still~~ bottom residue of said distillation for separating trimethylolpropane to crystallization using a solvent;

ii) after said crystallization, which leaves a remainder of the ~~still~~ bottom residue, subjecting a formal compound contained in the remainder of the ~~still~~ bottom residue to acid decomposition, whereby resulting products of said acid decomposition are formed; and

iii) recovering ditrimethylolpropane by subjecting the resulting products of ii) to crystallization, after said acid decomposition.

26. (previously presented) A process according to Claim 25, wherein the acid decomposition of the formal compound is performed at a temperature of 20 to 180°C using at least one of a mineral acid and an organic acid.

27. (previously presented) A process according to Claim 26, wherein the acid decomposition of the formal compound is performed by using an organic acid.

Claim 28. (cancelled)

29. (currently amended) A process for recovering ditrimethylolpropane by-produced when producing trimethylolpropane by reacting n-butyraldehyde with formaldehyde in the presence of a basic catalyst, and then separating trimethylolpropane by extraction and distillation, with ditrimethylolpropane being recovered from a ~~still~~ bottom residue of said distillation, said process for recovering ditrimethylolpropane comprising:

i) subjecting a formal compound contained in said ~~still~~ bottom residue of said distillation for separating trimethylolpropane to acid decomposition;

ii) removing high-boiling components having a higher boiling point than that of ditrimethylolpropane, by distillation, from the ~~still residue~~ product of said acid decomposition; and

iii) removing ditrimethylolpropane by subjecting resulting products of ii) to distillation for removal of low-boiling components.

30. (previously presented) A process according to Claim 29, comprising the further step of performing crystallization, using a solvent, after the removal of the low-boiling components by distillation, in step iii).

31. (currently amended) A process for recovering ditrimethylolpropane by-produced when producing trimethylolpropane by reacting n-butyraldehyde with formaldehyde in the presence of a basic catalyst, and then separating

trimethylolpropane by extraction and distillation, with ditrimethylolpropane being recovered from a ~~still~~ bottom residue of said distillation, said process for recovering ditrimethylolpropane comprising:

i) removing high-boiling components having a higher boiling point than that of ditrimethylolpropane, by distillation, from said ~~still~~ bottom residue of said distillation for separating trimethylolpropane;

ii) after said removing high-boiling components, which leaves a remainder of said ~~still~~ bottom residue, subjecting a formal compound contained in said remainder of said ~~still~~ bottom residue to acid decomposition, wherein at least one compound selected from the group consisting of alcohols and hydroxylamine salts is added to said ~~still~~ bottom residue together with at least one of a mineral acid and an organic acid, for said acid decomposition, whereby resulting products of said acid decomposition are formed; and

iii) recovering ditrimethylolpropane by subjecting the resulting products of ii) to crystallization using a solvent.

32. A process for recovering ditrimethylolpropane by-produced when producing trimethylolpropane by reacting n-butyraldehyde with formaldehyde in the presence of a basic catalyst, and then separating trimethylolpropane by extraction and distillation, with ditrimethylolpropane being recovered from a ~~still~~ bottom residue of said distillation, said process for recovering ditrimethylolpropane comprising:

i) subjecting said ~~still~~ bottom residue of the distillation for separating

trimethylolpropane to crystallization using a solvent;

ii) after said crystallization, which leaves a remainder of said ~~still~~ bottom residue, subjecting a formal compound contained in the remainder of the ~~still~~ bottom residue to acid decomposition, wherein at least one compound selected from the group consisting of alcohols and hydroxylamine salts is added to said ~~still~~ bottom residue together with at least one of a mineral acid and an organic acid, for said acid decomposition, whereby resulting products of said acid decomposition are formed; and

iii) recovering ditrimethylolpropane by subjecting the resulting products of ii) to crystallization, after said acid decomposition.

33. (currently amended) A process according to Claim 21, wherein said molecular distillation is performed using a film ~~evaporator~~ molecular still, and wherein said remainder of said bottom residue, after removing high-boiling components using the film molecular still, is condensed product from the top of the film molecular still.